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APPENDIX II

1999

ALBERTA
LINEAR PROPERTY
ASSESSMENT MANUAL

Alberta
Municipal Affairs
December 1999

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1. SCHEDULE A - BASE COST

The base cost represents the replacement cost of linear property in 1994.

1.1 LINEAR PROPERTY NOT DESCRIBED IN SCHEDULE A

The cost factors in Table 1,2,3,4 and the formula below shall be used to determine the base cost for linear property that is not described in Schedule A.

Formula: Base Cost = ac X cf

Where ac = the cost of linear property in the year it was constructed, as determined by the assessor.

cf = is the factor to convert the cost of the linear property (ac) from the year it was constructed in, to its cost in 1994.

1.1.1 TABLE 1 - Cost Factors For Electric Power Systems

Year of Construction	Cost Factor	Year of Construction	Cost Factor	Year of Construction	Cost Factor
		1942	9.99	1972	3.53
1913	18.86	1943	9.77	1973	3.31
1914	19.51	1944	9.71	1974	2.93
1915	19.88	1945	9.63	1975	2.43
1916	18.35	1946	8.93	1976	2.14
1917	15.57	1947	8.30	1977	1.96
1918	13.56	1948	7.94	1978	1.78
1919	11.97	1949	7.95	1979	1.57
1920	9.80	1950	7.73	1980	1.40
1921	10.87	1951	6.94	1981	1.24
1922	11.78	1952	6.50	1982	1.16
1923	11.48	1953	6.12	1983	1.28
1924	11.61	1954	6.05	1984	1.34
1925	11.79	1955	6.00	1985	1.30
1926	11.89	1956	5.76	1986	1.30
1927	11.90	1957	5.56	1987	1.26
1928	11.62	1958	5.45	1988	1.24
1929	11.18	1959	5.39	1989	1.18
1930	11.57	1960	5.34	1990	1.13
1931	12.46	1961	5.30	1991	1.07
1932	13.43	1962	5.29	1992	1.05
1933	14.08	1963	5.26	1993	1.03
1934	13.87	1964	5.05	1994	1.00
1935	13.73	1965	4.86	1995	1.00
1936	13.34	1966	4.68	1996	1.00
1937	12.49	1967	4.29	1997	0.99
1938	12.72	1968	4.48	1998	0.98
1939	12.60	1969	4.39	1999	0.97
1940	11.96	1970	3.97		
1941	10.91	1971	3.82		

1.1.2 TABLE 2 - Cost Factors For Telecommunication Systems *

Year of Construction	Cost Factor	Year of Construction	Cost Factor	Year of Construction	Cost Factor
		1942	9.99	1972	3.53
1913	18.86	1943	9.77	1973	3.31
1914	19.51	1944	9.71	1974	2.93
1915	19.88	1945	9.63	1975	2.43
1916	18.35	1946	8.93	1976	2.14
1917	15.57	1947	8.30	1977	1.96
1918	13.56	1948	7.94	1978	1.78
1919	11.97	1949	7.95	1979	1.57
1920	9.80	1950	7.73	1980	1.40
1921	10.87	1951	6.94	1981	1.24
1922	11.78	1952	6.50	1982	1.16
1923	11.48	1953	6.12	1983	1.15
1924	11.61	1954	6.05	1984	1.09
1925	11.79	1955	6.00	1985	1.05
1926	11.89	1956	5.76	1986	1.04
1927	11.90	1957	5.56	1987	1.00
1928	11.62	1958	5.45	1988	1.00
1929	11.18	1959	5.39	1989	0.98
1930	11.57	1960	5.34	1990	1.01
1931	12.46	1961	5.30	1991	0.97
1932	13.43	1962	5.29	1992	1.01
1933	14.08	1963	5.26	1993	0.98
1934	13.87	1964	5.05	1994	1.00
1935	13.73	1965	4.86	1995	1.00
1936	13.34	1966	4.68	1996	0.99
1937	12.49	1967	4.29	1997	0.99
1938	12.72	1968	4.48	1998	0.98
1939	12.60	1969	4.39	1999	1.03
1940	11.96	1970	3.97		
1941	10.91	1971	3.82		

* Does not include Cable Television Systems

1.1.3 TABLE 3 - Cost Factors For Cable Television Systems

Year of Construction	Cost Factor	Year of Construction	Cost Factor	Year of Construction	Cost Factor
1913	18.86	1942	9.99	1972	3.53
1914	19.51	1943	9.77	1973	3.31
1915	19.88	1944	9.71	1974	2.93
1916	18.35	1945	9.63	1975	2.43
1917	15.57	1946	8.93	1976	2.14
1918	13.56	1947	8.30	1977	1.96
1919	11.97	1948	7.94	1978	1.78
1920	9.80	1949	7.95	1979	1.57
1921	10.87	1950	7.73	1980	1.40
1922	11.78	1951	6.94	1981	1.24
1923	11.48	1952	6.50	1982	1.16
1924	11.61	1953	6.12	1983	1.28
1925	11.79	1954	6.05	1984	1.34
1926	11.89	1955	6.00	1985	1.30
1927	11.90	1956	5.76	1986	1.30
1928	11.62	1957	5.56	1987	1.26
1929	11.18	1958	5.45	1988	1.24
1930	11.57	1959	5.39	1989	1.18
1931	12.46	1960	5.34	1990	1.13
1932	13.43	1961	5.30	1991	1.07
1933	14.08	1962	5.29	1992	1.05
1934	13.87	1963	5.26	1993	1.03
1935	13.73	1964	5.05	1994	1.00
1936	13.34	1965	4.86	1995	1.00
1937	12.49	1966	4.68	1996	1.00
1938	12.72	1967	4.29	1997	1.00
1939	12.60	1968	4.48	1998	0.99
1940	11.96	1969	4.39	1999	0.97
1941	10.91	1970	3.97		
		1971	3.82		

1.1.4 TABLE 4 - Cost Factors For Pipeline

Year of Construction	Cost Factor	Year of Construction	Cost Factor	Year of Construction	Cost Factor
		1942	9.99	1972	3.53
1913	18.86	1943	9.77	1973	3.31
1914	19.51	1944	9.71	1974	2.93
1915	19.88	1945	9.63	1975	2.43
1916	18.35	1946	8.93	1976	2.14
1917	15.57	1947	8.30	1977	1.96
1918	13.56	1948	7.94	1978	1.78
1919	11.97	1949	7.95	1979	1.57
1920	9.80	1950	7.73	1980	1.40
1921	10.87	1951	6.94	1981	1.24
1922	11.78	1952	6.50	1982	1.16
1923	11.48	1953	6.12	1983	1.28
1924	11.61	1954	6.05	1984	1.34
1925	11.79	1955	6.00	1985	1.30
1926	11.89	1956	5.76	1986	1.30
1927	11.90	1957	5.56	1987	1.26
1928	11.62	1958	5.45	1988	1.24
1929	11.18	1959	5.39	1989	1.18
1930	11.57	1960	5.34	1990	1.13
1931	12.46	1961	5.30	1991	1.07
1932	13.43	1962	5.29	1992	1.05
1933	14.08	1963	5.26	1993	1.03
1934	13.87	1964	5.05	1994	1.00
1935	13.73	1965	4.86	1995	0.98
1936	13.34	1966	4.68	1996	0.97
1937	12.49	1967	4.29	1997	0.94
1938	12.72	1968	4.48	1998	0.91
1939	12.60	1969	4.39	1999	0.88
1940	11.96	1970	3.97		
1941	10.91	1971	3.82		

1.2 LINEAR PROPERTY DESCRIBED IN SCHEDULE A

The rates in Schedule A reflect typical costs for field installations of component types in both urban and rural municipalities. These rates apply to each component type described below regardless of the exact configuration of the system.

The base cost for linear property described in Schedule A Section 1.2 is determined as follows:

- 1) Select the property type.
- 2) Select the property component type.
- 3) Apply the formula associated with the property component type.

1.2.1 ELECTRIC POWER SYSTEMS (ELE)

1.2.1.1 Electric Power Distribution Systems

FORMULA: Base Cost = $n \times$ rate per customer hookup in each component type

Where n = the number of customer hookups in each component type

Code	Component Type	Rate Per Customer Hookup
EDS 10	0 -56 kVA or 0 - 50 kW	\$ 700
EDS 20	57 - 84 kVA or 51 - 76 kW	1,500
EDS 30	85 - 150 kVA or 77 - 135 kW	9,000
EDS 40	151 - 300 kVA or 136 - 270 kW	13,000
EDS 50	301 - 600 kVA or 271 - 540 kW	24,000
EDS 60	601 - 1500 kVA or 541 - 1350 kW	45,000
EDS 70	1501 - 4000 kVA or 1351 - 3600 kW	65,000
EDS 80	4001 - 6700 kVA or 3601 - 6000 kW	105,000

Component Type typically includes:

- poles and fixtures or trenching
- conductors
- transformers
- meters
- installation

1.2.1.2 Street Lighting

FORMULA: Base Cost = $n \times$ rate per pole of the component type

Where n = the number of poles of the component type

Code	Component Type	Rate Per Pole
ESL 10	All types and Sizes	\$ 800

Component Type typically includes:

- poles and fixtures
- installation

1.2.1.3 Oil and Gas Field Services

FORMULA: Base Cost = $n \times$ rate per customer hookup of the component type

Where n = the number of customer hookups of the component type

Code	Component Type	Rate Per Customer Hookup
EFS 10	Oil & Gas Service	\$ 7,950

Component Type typically includes:

- poles and fixtures
- conductors
- transformers
- meters
- lighting and related appurtenances
- installation

1.2.1.4 Electric Power Transmission Lines

FORMULA: Base Cost = $n \times$ rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type	Rate Per Kilometre
ET 10	Single Circuit - 60 to 75 kV	\$30,000
ET 20	Single Circuit - 76 to 150 kV	35,500
ET 30	Single Circuit - 151 to 250 kV	84,500
ET 40	Single Circuit - 251 to 500 kV	198,000
ET 50	Double Circuit - 60 to 75 kV	19,000
ET 60	Double Circuit - 76 to 150 kV	23,000
ET 70	Double Circuit - 151 to 250 kV	34,000

Component Type typically includes:

- poles and fixtures
- materials
- installation
- right of way (easements)

1.2.2 TELECOMMUNICATION SYSTEMS

1.2.2.1 CABLE TELEVISION SYSTEMS

1.2.2.1.1 Transmission & Distribution Line

FORMULA: Base Cost = $n \times$ rate per metre in each component type

Where n = length in metre(s) in each component type

Code	Component Type:	Rate Per Metre
CTD 10	Trunk Line 0 to 13mm	\$ 6.17
CTD 20	Trunk Line 14 to 19 mm	7.00
CTD 30	Trunk Line 20 to 25 mm	8.85
CTD 40	Joint Trunk Line 13 mm with 13 mm Distribution Line	10.56
CTD 50	Joint Trunk Line 19 mm with 13 mm Distribution Line	11.15
CTD 60	Additional Trunk Line to existing Trunk Line 13 mm	3.08
CTD 70	Additional Trunk Line to existing Trunk Line 19 mm	3.50
CTD 80	Additional Trunk Line to existing Trunk Line 25 mm	4.42
CTD 90	Distribution Line 10 mm	8.55
CTD 100	Distribution Line 13 mm	8.70

1.2.2.1.2 Service Hookups

FORMULA: Base Cost = n X rate per customer hookup in each component type

Where n = the number of customer hookups in each component type

Code	Component Type	Rate Per Customer Hookup
CSH 10	Single Service Drop	\$45
CSH 20	Service Drops Within a building	32

1.2.2.2 Cable Headend Equipment

FORMULA: Base Cost = n X rate per channel in the applicable component type

Where n = number of channels in the applicable component type

Code	Component Type	Rate Per Channel
CHD 10	Under 2000 Subscribers	\$1,000
CHD 20	2001 to 6000 Subscribers	2,000
CHD 30	Over 6000 Subscribers	5,000

Note: Rates are based on a 6 mega hertz analog channel.

1.2.3 PIPELINE (PL)

In this manual, the following definitions apply:

- a) "Abandoned" is the status of pipe determined on the record at Alberta Energy and Utilities Board or as determined by the assessor designated by the Minister of Municipal Affairs.
- b) "Deepest Producing Zone" is the depth of the well used to calculate base cost. Well depth may be one of the following:
 - mid point of the latest perforation in the range,
 - mid point of the latest perforation,
 - liner depth,
 - casing depth,
 - the total depth, or
 - the depth can also be established by the assessor designated by the Minister of Municipal Affairs.
- c) "Discontinued" is the status of pipe determined on the record at Alberta Energy and Utilities Board or as determined by the assessor designated by the Minister of Municipal Affairs.
- d) "Gas distribution system" means a pipeline or a system of pipelines designed, constructed, and operated for the distribution of gas to consumers in the immediate area, but does not include a gas conveyance pipeline licensed to operate under the Pipeline Act.
- e) "High Pressure" means design pressure 6200 kPa (900 psi) or greater.
- f) "Low pressure" means design pressure less than 6200 kPa (900 psi).
- g) "Non-producing well" means a well that did not produce in the 12 months preceding October 31 of that assessment year determined on the record at Alberta Energy and Utilities Board or as determined by the assessor designated by the Minister of Municipal Affairs.
- h) "Pool Code" is the code found on the well record at Alberta Energy and Utilities Board.
- i) "Shallow well" means a well producing gas from pool code 0158.
- j) "Single-zone tubingless well" is a producing single-zone gas well that has no production tubing.
- k) "Storage Wells" is the status of a well determined on the record at Alberta Energy and Utilities Board or as determined by the assessor designated by the Minister of Municipal Affairs.
- l) "Suspended" is the status of a well determined on the record at Alberta Energy and Utilities Board or as determined by the assessor designated by the Minister of Municipal Affairs.
- m) "Water source/supply well" is a well that supplies water for injection to an underground formation.
- n) "Well site" means the area of land associated with a well.
- o) "Zone" has the meaning given to it in the Oil and Gas Conservation Act.

Single-Zone and Multi-Zone Wells

In this section, the assessment of pipeline that is standardized well pipe, and well head installations in or on a well for which a license is required under the Oil and Gas Conservation Act, shall be determined according to section 1.2.3.3 and 1.2.3.4 of this manual.

Assessment Commissioner's Bulletin No. 4/83 and 2/86, (the 'Bulletins') are not prescribed by Statute or regulation. The Bulletins are not relevant to well assessment and should not be relied upon. The current legislation should be used for the definition of pipeline.

1.2.3.1 Pipe (PL)

FORMULA: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type	Rate Per Kilometre
PL 10	Steel, Low Pressure, 21.3 mm	\$ 14,300
PL 20	Steel, Low Pressure, 26.7 mm	15,000
PL 30	Steel, Low Pressure, 33.4 mm	15,700
PL40	Steel, Low Pressure, 42.2 mm	17,400
PL 50	Steel, Low Pressure, 48.3 mm	17,400
PL 60	Steel, Low Pressure, 60.3 mm	25,300
PL 70	Steel, Low Pressure, 88.9 mm	31,100
PL 80	Steel, Low Pressure, 114.3 mm	39,800
PL 90	Steel, Low Pressure, 168.3 mm	50,800
PL100	Steel, Low Pressure, 219.1 mm	64,500
PL110	Steel, Low Pressure, 273.1 mm	75,900
PL120	Steel, Low Pressure, 323.9 mm	87,800
PL130	Steel, Low Pressure, 355.6 mm	107,900
PL140	Steel, Low Pressure, 406.4 mm	130,400
PL150	Steel, Low Pressure, 457.0 mm	164,400
PL160	Steel, Low Pressure, 508.0 mm	188,700
PL170	Steel, Low Pressure, 559.0 mm	204,600
PL180	Steel, Low Pressure, 610.0 mm	257,200
PL190	Steel, Low Pressure, 660.0 mm	284,300
PL200	Steel, Low Pressure, 711.0 mm	300,400
PL210	Steel, Low Pressure, 762.0 mm	337,500
PL220	Steel, Low Pressure, 813.0 mm	373,100
PL230	Steel, Low Pressure, 864.0 mm	390,400
PL240	Steel, Low Pressure, 914.0 mm	432,700
PL250	Steel, Low Pressure, 1067.0 mm	517,900
PL260	Steel, Low Pressure, 1219.0 mm	653,800
PL270	Steel, Low Pressure, 1422.0 mm	891,900
PL280	Steel, High pressure, 21.3 mm	15,800
PL290	Steel, High pressure, 26.7 mm	16,400
PL300	Steel, High pressure, 33.4 mm	17,100
PL310	Steel, High pressure, 42.2 mm	19,100
PL320	Steel, High pressure, 48.3 mm	19,100

Pipe (CONT'D)

FORMULA: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type	Rate Per Kilometre
PL340	Steel, High pressure, 60.3 mm	\$ 26,200
PL350	Steel, High pressure, 88.9 mm	32,100
PL360	Steel, High pressure, 114.3 mm	40,900
PL370	Steel, High pressure, 168.3 mm	58,100
PL380	Steel, High pressure, 219.1 mm	78,800
PL390	Steel, High pressure, 273.1 mm	92,800
PL400	Steel, High pressure, 323.9 mm	105,600
PL410	Steel, High pressure, 355.6 mm	126,100
PL420	Steel, High pressure, 406.4 mm	149,000
PL430	Steel, High pressure, 457.0 mm	182,200
PL440	Steel, High pressure, 508.0 mm	199,600
PL450	Steel, High pressure, 559.0 mm	231,600
PL460	Steel, High pressure, 610.0 mm	275,300
PL470	Steel, High pressure, 660.0 mm	300,700
PL480	Steel, High pressure, 711.0 mm	333,000
PL490	Steel, High pressure, 762.0 mm	374,800
PL500	Steel, High pressure, 813.0 mm	396,700
PL510	Steel, High pressure, 864.0 mm	433,800
PL520	Steel, High pressure, 914.0 mm	480,300
PL530	Steel, High pressure, 1067.0 mm	570,600
PL540	Steel, High pressure, 1219.0 mm	741,300
PL550	Steel, High pressure, 1422.0 mm	1,005,100
PL560	Aluminum, 42.2 mm	14,600
PL570	Aluminum, 48.3 mm	14,600
PL580	Aluminum, 60.3 mm	18,000
PL590	Aluminum, 88.9 mm	24,400
PL600	Aluminum, 114.3 mm	35,400
PL610	Stainless Steel, 168.3mm	109,400
PL620	Hot Water Return, 168.3 mm	123,500
PL630	Heated Sulphur, 323.9 mm	391,700

Pipe (CONT'D)

FORMULA: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type	Rate Per Kilometre
PL690	Plastic / PVC / Fiberglass, 21.3 mm	\$ 7,700
PL700	Plastic / PVC / Fiberglass, 26.7 mm	8,200
PL710	Plastic / PVC / Fiberglass, 33.4 mm	8,600
PL720	Plastic / PVC / Fiberglass, 42.2 mm	9,300
PL730	Plastic / PVC / Fiberglass, 48.3 mm	9,300
PL740	Plastic / PVC / Fiberglass, 60.3 mm	10,200
PL750	Plastic / PVC / Fiberglass, 88.9 mm	13,200
PL760	Plastic / PVC / Fiberglass, 114.3 mm	18,500
PL770	Plastic / PVC / Fiberglass, 168.3 mm	26,000
PL780	Plastic / PVC / Fiberglass, 219.1 mm	46,600
PL790	Plastic / PVC / Fiberglass, 273.1 mm	61,900
PL800	Plastic / PVC / Fiberglass, 323.9 mm	77,000
PL810	Plastic Lined / Cement Lined, 42.2 mm	32,700
PL820	Plastic Lined / Cement Lined, 48.3 mm	32,700
PL830	Plastic Lined / Cement Lined, 60.3 mm	36,500
PL840	Plastic Lined / Cement Lined, 88.9 mm	40,500
PL850	Plastic Lined / Cement Lined, 114.3 mm	53,800
PL860	Plastic Lined / Cement Lined, 168.3 mm	73,600
PL870	Plastic Lined / Cement Lined, 219.1 mm	98,300
PL880	Plastic Lined / Cement Lined, 273.1 mm	127,400
PL890	Plastic Lined / Cement Lined, 323.9 mm	144,400
PL900	Plastic Lined / Cement Lined, 355.6 mm	177,500
PL910	Plastic Lined / Cement Lined, 406.4 mm	230,000
PL920	Plastic Lined / Cement Lined, 457.0 mm	264,300
PL930	Steam Injection, 219.1 mm	563,500
PL940	Steam Injection, 355.6 mm	770,100
PL950	Steam Injection, 406.4 mm	883,900
PL960	Steam Injection, 457 mm	981,500
PL970	Steam Injection, 508 mm	1,069,700

1.2.3.2 Gas Distribution System (PL)

FORMULA: Base Cost = $n \times$ rate per customer hookup in each component type

Where n = number of customer hookups in each component type

Code	Component Type	Rate Per Customer Hookup
GDS010	8.5 cubic metres per hour or less. Service line from tap to meter.	\$176.00
GDS020	8.5 cubic metres per hour or greater. Service line from tap to meter	182.00
GDS030	8.5 cubic metres per hour or less. Meter set including meter with regulator	181.00
GDS040	8.5 cubic metres per hour or greater. Meter set including meter with regulator	1,413.00

Footnote: For distribution and transmission pipe use Section 1.2.3.1

1.2.3.3 Single Zone and Multi Zone Wells (WL)

FORMULA: Base Cost = Constant + $(n - 304m) \times$ rate per metres of depth in each component type

Where n = depth in metres of the deepest producing zone in each component type.

Note : If " n " is less than 304 metres, then n equals 304 metres.

Code	Component Type	Constant	Rate per metre
WL 10	Single Zone - Crude Oil Flow	\$39,990	\$74.80
WL 20	Single Zone - Crude Oil Pump	59,620	87.30
WL 30	Single Zone - Gas Flow	30,900	81.90
WL 40	Single Zone - Injection/Disposal	38,320	91.90
WL 50	Single Zone - Crude Bitumen	77,100	127.10
WL 80	Multi Zone - Crude Oil Flow	50,100	82.00
WL 90	Multi Zone - Crude Oil Pump	71,220	121.20
WL 100	Multi Zone - Gas Flow	43,980	83.20
WL 110	Multi Zone - Injection/Disposal	57,930	128.60

1.2.3.4 Single Zone and Multi Zone Wells

FORMULA: Base Cost = Constant + (n X rate per metres of depth) in each component type.

Where n = depth in metres of the deepest producing zone in each component type.

Code	Component Type	Constant	Rate per metre
WL 60	Single Zone - Tubingless	9,180	54.10
WL 70	Single Zone - Water Source/Supply	12,000	0
WL 230	Single Zone - Shallow Well*	2,380	59.50
WL 240	Multi Zone - Shallow Well*	2,380	59.50

*Note : Shallow Well shall produce from pool code 0158 .

2. SCHEDULE B – ASSESSMENT YEAR MODIFIERS

ASSESSMENT YEAR MODIFIERS BY PROPERTY TYPE

2.1 ELECTRIC POWER SYSTEMS

Code	Property Type	Year	Assessment Year Modifier
EM 98	Electric Power Systems	1998	1.02
EM 99	Electric Power Systems	1999	1.03

2.2 TELECOMMUNICATION SYSTEMS

Code	Property Type	Year	Assessment Year Modifier
TM 98	Telecommunication Systems*	1998	1.02
TM 99	Telecommunication Systems*	1999	0.97
CM 98	Cable Television Systems	1998	1.01
CM 99	Cable Television Systems	1999	1.03

* Does not include Cable Television Systems

2.3 PIPELINE

Code	Property Type	Year	Assessment Year Modifier
PM 98	Pipeline	1998	1.10
PM 99	Pipeline	1999	1.13

3. SCHEDULE C -- DEPRECIATION

For linear property that is not described in Schedule C the depreciation factor shall be determined in a manner that is fair and equitable with factors in Schedule C.

"Age" means the chronological age or the effective age, in years.

3.1 ELECTRIC POWER SYSTEMS

The depreciation factor for electric power systems is 0.75, unless otherwise specified in this section.

3.1.1 Thermal Generation Plants and Substations

THERMAL GENERATION PLANTS AND SUBSTATIONS
DEPRECIATION FACTOR TABLE

Age (Years)	Depreciation Factor	Age (Years)	Depreciation Factor	Age (Years)	Depreciation Factor
0	1.00	15	0.49	30	0.22
1	0.96	16	0.46	31	0.21
2	0.92	17	0.44	32	0.20
3	0.87	18	0.42	33	0.19
4	0.84	19	0.40	34	0.18
5	0.80	20	0.38	35	0.17
6	0.76	21	0.36	36	0.16
7	0.72	22	0.34	37	0.15
8	0.69	23	0.32	38	0.14
9	0.66	24	0.31	39	0.13
10	0.62	25	0.29	40	0.12
11	0.59	26	0.28		
12	0.57	27	0.26		
13	0.54	28	0.25		
14	0.51	29	0.24		

3.1.2 Hydro Generation Plants

HYDRO GENERATION PLANTS
DEPRECIATION FACTOR TABLE

Age (Years)	Depreciation Factor	Age (Years)	Depreciation Factor	Age (Years)	Depreciation Factor
0	1.00	26	0.50	52	0.22
1	0.98	27	0.48	53	0.21
2	0.96	28	0.46	54	0.21
3	0.94	29	0.44	55	0.20
4	0.92	30	0.43	56	0.20
5	0.90	31	0.41	57	0.19
6	0.88	32	0.40	58	0.19
7	0.86	33	0.38	59	0.18
8	0.84	34	0.37	60	0.18
9	0.82	35	0.36	61	0.17
10	0.80	36	0.35	62	0.17
11	0.78	37	0.33	63	0.17
12	0.76	38	0.32	64	0.16
13	0.74	39	0.31	65	0.16
14	0.72	40	0.30	66	0.15
15	0.70	41	0.29	67	0.15
16	0.68	42	0.28	68	0.14
17	0.66	43	0.28	69	0.14
18	0.64	44	0.27	70	0.13
19	0.62	45	0.26	71	0.13
20	0.60	46	0.26	72	0.12
21	0.59	47	0.25	73	0.12
22	0.57	48	0.24	74	0.12
23	0.55	49	0.24	75	0.11
24	0.53	50	0.23		
25	0.51	51	0.23		

3.1.3 Wind Generation PlantsWIND GENERATION PLANTS
DEPRECIATION FACTOR TABLE

Age (Years)	Depreciation Factor	Age (Years)	Depreciation Factor	Age (Years)	Depreciation Factor
0	1.00	7	0.51	14	0.25
1	0.92	8	0.46	15	0.22
2	0.84	9	0.42	16	0.20
3	0.76	10	0.38	17	0.18
4	0.69	11	0.34	18	0.16
5	0.62	12	0.31	19	0.14
6	0.57	13	0.28	20	0.12

3.2 TELECOMMUNICATION SYSTEMS

3.2.1 Telephone Systems

The depreciation factor for telephone systems is 0.75.

3.2.2 Cable Television Systems

The depreciation factor for cable television systems is 0.75.

3.3 PIPELINE

The depreciation factor for pipeline is 0.75.

4. SCHEDULE D – ADDITIONAL DEPRECIATION

4.1 ELECTRIC POWER SYSTEMS

For any depreciation that is not reflected in Schedule C Tables 3.1.1, 3.1.2 and 3.1.3 only, the assessor designated by the Minister may adjust for additional depreciation provided acceptable evidence of such loss in value exists.

4.2 TELECOMMUNICATION SYSTEMS

4.2.1 Cable Television Systems

4.2.1.1 Service Drops, Transmission and Distribution Line

Additional depreciation of cable television systems shall be determined using the table and formula below.

ADDITIONAL DEPRECIATION FACTOR TABLE

Penetration Rate	Depreciation Factor
80 and above	1.00
75 to 79.99	0.95
70 to 74.99	0.90
65 to 69.99	0.85
60 to 64.99	0.80
55 to 59.99	0.75
50 to 54.99	0.70
45 to 49.99	0.65
40 to 44.99	0.60
35 to 39.99	0.55
Under 35	0.50

NOTE: : Formula To Determine Penetration Rate Percentage =
(total operational services divided by total services per cable system) X 100

4.3 PIPELINE

4.3.1 Pipe

Additional depreciation of pipe shall be determined using the table below.

ADDITIONAL DEPRECIATION FACTOR TABLE

Code	Pipe	Depreciation Factor
PLW	Pipe that has facility code WE and the to or from location is within an LSD that has a non producing well	0.10
PLD	Discontinued	0.10
PLA	Abandoned	0
PLO	Pipe Constructed prior to 1940*	0.50

*Status declared by each company.

4.3.2 Single and Multi-Zone Wells

Additional depreciation for a well shall be determined using the table below. The operational data of a well is compiled for the period of 12 months preceding October 31 of the assessment year as determined on the record at Alberta Energy and Utilities Board.

ADDITIONAL DEPRECIATION FACTOR TABLE

Code	Single and Multi-Zone Wells	Depreciation Factor
WL 200	Exempt	0
WL 210	Non-producing well	0.10
WL 211	Suspended well*	0.10
WL 220	Abandoned well	0
OOWL	Operational Oil well thru-put >477 M3	1.00
OOWL	Operational Oil well thru-put 397.1 - 477 M3	0.86
OOWL	Operational Oil well thru-put 318.1 - 397 M3	0.72
OOWL	Operational Oil well thru-put 238.1 - 318 M3	0.57
OOWL	Operational Oil well thru-put 159.1 - 238 M3	0.43
OOWL	Operational Oil well thru-put 79.1 - 159 M3	0.29
OOWL	Operational Oil well thru-put 1 - 79.0 M3	0.15
OGWL	Operational Gas well thru-put >507 TM3	1.00
OGWL	Operational Gas well thru-put 423.1 - 507 TM3	0.86
OGWL	Operational Gas well thru-put 282.1 - 423 TM3	0.62
OGWL	Operational Gas well thru put 141.1 - 282 TM3	0.39
OGWL	Operational Gas well thru-put 1 - 141.0 TM3	0.15
OGSH	Operational Shallow gas well thru-put >183 TM3	1.00
OGSH	Operational Shallow gas well thru-put 142.1 - 183 TM3	0.86
OGSH	Operational Shallow gas well thru-put 86.1 - 142 TM3	0.62
OGSH	Operational Shallow gas well thru-put 29.1 - 86 TM3	0.39
OGSH	Operational Shallow gas well thru-put 1 - 29.0 TM3	0.15
IDW	Injection/Disposal well operating >720hrs	1.00
IDW	Injection/Disposal well operating 600 - 720hrs	0.86
IDW	Injection/Disposal well operating 360 - 599hrs	0.72
IDW	Injection/Disposal well operating 140 - 359hrs	0.49
IDW	Injection/Disposal well operating 1 - 139hrs	0.15
OWWL	Water Source/Supply well operating >720hrs	1.00
OWWL	Water Source/Supply well operating 600 - 720hrs	0.86
OWWL	Water Source/Supply well operating 360 - 599hrs	0.72
OWWL	Water Source/Supply well operating 140 - 359hrs	0.49
OWWL	Water Source/Supply well operating 1 - 139hrs	0.15
WL250	Storage wells **	1.00

* Apply factor to operating well type prior to suspended status occurring.

** Apply factor to operating Injection/Disposal well type for Storage wells status.

5. SCHEDULE E - WELLSITE LAND (WS)

The assessed value for well site land shall be as prescribed in the table.

Geographic Boundary Description	Assessment Amount Per Well
(WS) All locations	\$1,460

1999

MINISTER'S GUIDELINES

FOR THE ASSESSMENT

OF

FARMLAND

LINEAR PROPERTY

MACHINERY AND EQUIPMENT

RAILWAY

Minister's Guidelines for Farm Land, Linear Property, Machinery and Equipment and Railway Assessment

Part 1: General

1 Application

These Guidelines constitute the

- (a) 1999 Alberta Farm Land Assessment Minister's Guidelines;
- (b) 1999 Alberta Linear Property Assessment Minister's Guidelines; and
- (c) 1999 Alberta Machinery and Equipment Minister's Guidelines
- (d) 1999 Alberta Railway Assessment Minister's Guidelines;

and are to be used in conjunction with the provisions of

- (e) the 1999 Alberta Farm Land Assessment Manual updated, in the case of land used for farming operations, attached as Appendix I
- (f) the 1999 Alberta Linear Property Assessment Manual, in the case of linear property in a municipality, attached as Appendix II
- (g) the 1999 Alberta Machinery and Equipment Assessment Manual, in the case of machinery and equipment in a municipality, attached as Appendix III.
- (h) the 1999 Alberta Railway Assessment Manual, in the case of railway property in a municipality, attached as Appendix IV

2 General Definitions

In these Guidelines,

- (a) "Act" means the Municipal Government Act (SA 1994 cM-26.1);
- (b) "assessment year" has the meaning given to it in the Regulation;
- (c) "Regulation" means the Matters Relating To Assessment and Taxation Regulation(AR 289/99), as amended.

2.1 Ministerial Prescription

For purposes of these Guidelines and section 2(b) of the Regulation, it is hereby prescribed that the cost of all computer software, including both basic software and applications software, intended for or used in connection with the monitoring, control or operation of any assessable property shall be included in the base cost of the property which is otherwise assessable.

Part 2: Assessment of land used for farming operations

3 Definitions

In this Part,

- (a) "Agricultural Use Value" means the value of a parcel of land based exclusively on its use for farming operations;
- (b) "Assessment Year Modifier" means the factor which is applied to the value of land used for farming operations in order to determine its value in the year in which assessments are prepared for all property in a municipality;
- (c) "farming operation" has the meaning given to it in the Regulation;
- (d) "field" means a separately valued area within a parcel of land that is used for farming operations.

4 Calculation of agricultural use value

The agricultural use value of land used for farming operations shall be calculated by

- (a) using the agricultural use value base rate table in Schedule A of the 1999 Alberta Farm Land Assessment Manual updated to establish the property's agricultural use value base rate;
- (b) multiplying the agricultural use value base rate by the appropriate Assessment Year Modifier prescribed in Schedule B of the 1999 Alberta Farm Land Assessment Manual updated to determine the agricultural use value base rate per acre for the assessment year;
- (c) multiplying the agricultural use value base rate per acre by a Final Rating Factor prescribed in Schedule C of the 1999 Alberta Farm Land Assessment Manual updated to determine the agricultural use value per acre for the field;

- (d) multiplying the agricultural use value per acre for the field by the number of acres in each field to determine the agricultural use value of the field;
- (e) adding together the agricultural use value for each field to determine the agricultural use value of the parcel; and
- (f) multiplying the agricultural use value of the parcel by the Farm Service Centre Rating factor prescribed in Schedule D of the 1999 Alberta Farm Land Assessment Manual updated.

Part 3: Assessment of linear property in a municipality

5 Definitions

In this Part

- (a) "Assessment Year Modifier", means the factor which is applied to the base cost of linear property in order to determine its replacement cost for the year in which assessments are prepared for all property in a municipality;
- (b) "base cost" means the cost of an improvement, as prescribed in the 1999 Alberta Linear Property Assessment Manual;
- (c) "linear property" has the meaning given to it in the Act;
- (d) "replacement cost" means the typical cost to replace an improvement with a modern unit in new condition.

6 Calculation of assessment

The assessed value of linear property in a municipality, excluding wellsite land, shall be calculated by:

- (a) establishing the base cost as prescribed in Schedule A of the 1999 Alberta Linear Property Assessment Manual;
- (b) multiplying the base cost by the appropriate Assessment Year Modifier prescribed in Schedule B of the 1999 Alberta Linear Property Assessment Manual, to determine the replacement cost in the assessment year;
- (c) multiplying the amount determined in clause (b) by the appropriate depreciation factor prescribed in Schedule C of the 1999 Alberta Linear Property Assessment Manual; and

- (d) if applicable, adjusting the amount determined in clause (c) for additional depreciation as prescribed in Schedule D of the 1999 Alberta Linear Property Assessment Manual.

7 Assessed value of wellsite land

Notwithstanding section 6, the assessed value of wellsite land shall be the amount prescribed described in Schedule E of the 1999 Alberta Linear Property Assessment Manual.

Part 4: Assessment of machinery and equipment in a municipality.

8 Definitions

In this Part

- (a) "Assessment Year Modifier", means the factor which is applied to the base cost of machinery and equipment in order to determine its replacement cost for the year in which assessments are prepared for all property in a municipality;
- (b) "base cost" means the cost of an improvement, as prescribed in the 1999 Alberta Machinery and Equipment Assessment Manual;
- (c) "machinery and equipment" has the meaning given to it in the Regulation;
- (d) "replacement cost" means the typical cost to replace an improvement with a modern unit in new condition

9 Calculation of assessment

The assessed value of machinery and equipment in a municipality shall be calculated by:

- (a) establishing the base cost as prescribed in Schedule A of the 1999 Alberta Machinery and Equipment Assessment Manual,
- (b) multiplying the base cost by the appropriate Assessment Year Modifier prescribed in Schedule B of the 1999 Alberta Machinery and Equipment Assessment Manual to determine the replacement cost in the assessment year,
- (c) multiplying the amount determined in clause (b) by the appropriate depreciation factor prescribed in Schedule C of the 1999 Alberta Machinery and Equipment Assessment Manual and
- (d) if applicable, adjusting the amount determined in clause (c) for additional depreciation as prescribed in Schedule D of the 1999 Alberta Machinery and Equipment Assessment Manual.

10 Additional adjustment under the Assessable Property Regulation

In addition to the assessment calculation prescribed in section 9, the assessed value of machinery and equipment shall be further adjusted by a factor as prescribed in section 2(2) of the Assessable Property Regulation (AR 367/94).

Part 4: Assessment of railway in a municipality.

11 Definitions

In this Part

- (a) "Assessment Year Modifier", means the factor which is applied to the base cost of railway in order to determine its replacement cost for the year in which assessments are prepared for all property in a municipality;
- (b) "base cost" means the cost of railway, as prescribed in the 1999 Alberta Railway Assessment Manual;
- (c) "railway" has the meaning given to it in the Act;

12 Calculation of assessment

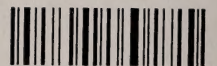
The assessed value of railway in a municipality shall be calculated by:

- (a) establishing the base cost as prescribed in Schedule A of the 1999 Alberta Railway Assessment Manual,
- (b) multiplying the base cost by the appropriate Assessment Year Modifier prescribed in Schedule B of the 1999 Alberta Railway Assessment Manual to determine the replacement cost in the assessment year,
- (c) multiplying the amount determined in clause (b) by the appropriate annual traffic factor prescribed in Schedule C of the 1999 Alberta Railway Assessment Manual.

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